1600

RAW SEQUENCE LISTING　　　　　　　　　　DATE: 09/30/2003
PATENT APPLICATION: **US/09/938,497A**　　　TIME: 11:17:54

Input Set : **A:\012889-086.ST25.txt**
Output Set: **N:\CRF4\09302003\I938497A.raw**

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 4 <110> APPLICANT: Wastfelt, Maria K. Boden
 5        Flock, Jan-Ingmar
 7 <120> TITLE OF INVENTION: Fibrinogen Binding Protein
 9 <130> FILE REFERENCE: 012889-086
11 <140> CURRENT APPLICATION NUMBER: US 09/938,497A
12 <141> CURRENT FILING DATE: 2001-08-27
14 <150> PRIOR APPLICATION NUMBER: US 09/276,141
15 <151> PRIOR FILING DATE: 1999-03-25
17 <150> PRIOR APPLICATION NUMBER: PCT/SE93/00759
18 <151> PRIOR FILING DATE: 1993-09-20
20 <150> PRIOR APPLICATION NUMBER: SE 9302955-01
21 <151> PRIOR FILING DATE: 1993-09-13
23 <150> PRIOR APPLICATION NUMBER: SE 9202720-0
24 <151> PRIOR FILING DATE: 1992-09-21
26 <160> NUMBER OF SEQ ID NOS: 17
28 <170> SOFTWARE: FastSEQ for Windows Version 4.0
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31 <211> LENGTH: 20
32 <212> TYPE: PRT
33 <213> ORGANISM: Staphylococcus aureus
35 <400> SEQUENCE: 1
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37 1               5                   10                  15
38 Lys Tyr Gly Thr
39             20
42 <210> SEQ ID NO: 2
43 <211> LENGTH: 20
44 <212> TYPE: PRT
45 <213> ORGANISM: Staphylococcus aureus
47 <400> SEQUENCE: 2
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49 1               5                   10                  15
50 Lys Lys Gly Ala
51             20
54 <210> SEQ ID NO: 3
55 <211> LENGTH: 20
56 <212> TYPE: PRT
57 <213> ORGANISM: Staphylococcus aureus
59 <400> SEQUENCE: 3
60 Ile Val Thr Lys Asp Tyr Ser Gly Lys Ser Gln Val Asn Ala Gly Ser
61 1               5                   10                  15
62 Lys Asn Gly Thr
63             20
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66 <210> SEQ ID NO: 4
67 <211> LENGTH: 20
68 <212> TYPE: PRT
69 <213> ORGANISM: Staphylococcus aureus
71 <400> SEQUENCE: 4
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73 1               5               10              15
74 Lys Asn Gly Thr
75             20
78 <210> SEQ ID NO: 5
79 <211> LENGTH: 20
80 <212> TYPE: PRT
81 <213> ORGANISM: Staphylococcus aureus
83 <400> SEQUENCE: 5
84 Ser Glu Gly Tyr Gly Pro Arg Glu Lys Lys Pro Val Ser Ile Asn His
85 1               5               10              15
86 Asn Ile Val Glu
87             20
90 <210> SEQ ID NO: 6
91 <211> LENGTH: 8
92 <212> TYPE: PRT
93 <213> ORGANISM: Staphylococcus aureus
95 <400> SEQUENCE: 6
96 Met Tyr Pro Glu Lys Lys Pro Val
97 1               5
100 <210> SEQ ID NO: 7
101 <211> LENGTH: 408
102 <212> TYPE: DNA
103 <213> ORGANISM: Artificial Sequence
105 <220> FEATURE:
106 <223> OTHER INFORMATION: nucleotide sequence for fibrinogen-binding protein
108 <400> SEQUENCE: 7
109 gagcgaagga tacggtccaa gagaaaagaa accagtgagt attaatcaca atatcgtaga 60
110 gtacaatgat ggtactttta aatatcaatc tagaccaaaa tttaactcaa cacctaaata 120
111 tattaaattc aaacatgact ataatatttt agaatttaac gatggtacat tcgaatatgg 180
112 tgcacgtcca caatttaata aaccagcagc gaaaactgat gcaactatta aaaaagaaca 240
113 aaaattgatt caagctcaaa atcttgtgag agaatttgaa aaaacacata ctgtcagtgc 300
114 acacagaaaa gcacaaaagg cagtcaactt agtttcgttt gaatacaaag tgaagaaaat 360
115 ggtcttacaa gagcgaattg ataatgtatt aaaacaagga ttagtgag           408
117 <210> SEQ ID NO: 8
118 <211> LENGTH: 136
119 <212> TYPE: PRT
120 <213> ORGANISM: Artificial Sequence
122 <220> FEATURE:
123 <223> OTHER INFORMATION: fibrinogen-binding protein
125 <400> SEQUENCE: 8
126 Asp Glu Gly Tyr Gly Pro Arg Glu Lys Lys Pro Val Ser Ile Asn His
127 1               5               10              15
128 Asn Ile Val Glu Tyr Asn Asp Gly Thr Phe Lys Tyr Gln Ser Arg Pro
```

```
129            20              25              30
130 Lys Phe Asn Ser Thr Pro Lys Tyr Ile Lys Phe Lys His Asp Tyr Asn
131 .         35              40              45
132 Ile Leu Glu Phe Asn Asp Gly Thr Phe Glu Tyr Gly Ala Arg Pro Gln
133    50              55              60          .
134 Phe Asn Lys Pro Ala Ala Lys Thr Asp Ala Thr Ile Lys Lys Glu Gln ·
135 65              70              75              80
136 Lys Leu Ile Gln Ala Gln Asn Leu Val Arg Glu Phe Glu Lys Thr His
137             85   ·          90              95
138 Thr Val Ser Ala His Arg Lys Ala Gln Lys Ala Val Asn Leu Val Ser
139             100             105             110
140 Phe Glu Tyr Lys Val Lys Lys Met Val Leu Gln Glu Arg Ile Asp Asn
141          115             120             125
142 Val Leu Lys Gln Gly Leu Val Arg
143       130             135
146 <210> SEQ ID NO: 9
147 <211> LENGTH: 1009
148 <212> TYPE: DNA
149 <213> ORGANISM: Artificial Sequence
151 <220> FEATURE:
152 <223> OTHER INFORMATION: fib protein
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155 <222> LOCATION: (157)...(654)
W--> 157 <221> CDS
158 <222> LOCATION: (804)...(1007)
W--> 160 <400> 9
161 gactagtgta taagtgctga tgagtcacaa gatagataac tatattttgt ctatattata 60
162 aagtgtttat agttaattaa taattagtta atttcaaaag ttgtataaat aggataactt 120
163 aataaatgta agataataat ttggaggata attac atg aaa aat aaa ttg ata    174
164                                         Met Lys Asn Lys Leu Ile
165                                           1               5
167 gca aaa tct tta tta aca ata gcg gca att ggt att act aca act aca  222
168 Ala Lys Ser Leu Leu Thr Ile Ala Ala Ile Gly Ile Thr Thr Thr Thr
169              10              15              20
171 att gcg tca aca gca gat gcg agc gaa gga tac ggt cca aga gaa aag  270
172 Ile Ala Ser Thr Ala Asp Ala Ser Glu Gly Tyr Gly Pro Arg Glu Lys
173          25              30              35
175 aaa cca gtg agt att aat cac aat atc gta gag tac aat gat ggt act  318
176 Lys Pro Val Ser Ile Asn His Asn Ile Val Glu Tyr Asn Asp Gly Thr
177       40              45              50
179 ttt aaa tat caa tct aga cca aaa ttt aac tca aca cct aaa tat att  366
180 Phe Lys Tyr Gln Ser Arg Pro Lys Phe Asn Ser Thr Pro Lys Tyr Ile
181 55              60              65              70
183 aaa ttc aaa cat gac tat aat att tta gaa ttt aac gat ggt aca ttc  414
184 Lys Phe Lys His Asp Tyr Asn Ile Leu Glu Phe Asn Asp Gly Thr Phe
185             75              80              85
187 gaa tat ggt gca cgt cca caa ttt aat aaa cca gca gcg aaa act gat  462
188 Glu Tyr Gly Ala Arg Pro Gln Phe Asn Lys Pro Ala Ala Lys Thr Asp
189          90              95          ·    100
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Input Set : **A:\012889-086.ST25.txt**
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191 gca act att aaa aaa gaa caa aaa ttg att caa gct caa aat ctt gtg  510
192 Ala Thr Ile Lys Lys Glu Gln Lys Leu Ile Gln Ala Gln Asn Leu Val
193         105                 110                 115
195 aga gaa ttt gaa aaa aca cat act gtc agt gca cac aga aaa gca caa  558
196 Arg Glu Phe Glu Lys Thr His Thr Val Ser Ala His Arg Lys Ala Gln
197         120                 125                 130
199 aag gca gtc aac tta gtt tcg ttt gaa tac aaa gtg aag aaa atg gtc  606
200 Lys Ala Val Asn Leu Val Ser Phe Glu Tyr Lys Val Lys Lys Met Val
201 135                 140                 145                 150
203 tta caa gag cga att gat aat gta tta aaa caa gga tta gtg aga taa  654
204 Leu Gln Glu Arg Ile Asp Asn Val Leu Lys Gln Gly Leu Val Arg  *
205                 155                 160                 165
207 tacttctgtc attattttaa gttcaaaata atttaatatt atattatttt ttattaataa 714
208 aacgactatg ctatttaatg ccaggttaat gtaactttcc taaaattgac tatataatcg 774
209 ttaagtatca attttaagga gagtttaca atg aaa ttt aaa aaa tat ata tta  827
210                                 Met Lys Phe Lys Lys Tyr Ile Leu
211                                                 170
213 aca gga aca tta gca tta ctt tta tca tca act ggg ata gca act ata  875
214 Thr Gly Thr Leu Ala Leu Leu Leu Ser Ser Thr Gly Ile Ala Thr Ile
215         175                 180                 185
217 gaa ggg aat aaa gca gat gca agt agt ctg gac aaa tat tta act gaa  923
218 Glu Gly Asn Lys Ala Asp Ala Ser Ser Leu Asp Lys Tyr Leu Thr Glu
219 190                 195                 200                 205
221 agt cag ttt cat gat aaa cgc ata gca gaa gaa tta aga act tta ctt  971
222 Ser Gln Phe His Asp Lys Arg Ile Ala Glu Glu Leu Arg Thr Leu Leu
223                 210                 215                 220
225 aac aaa tcg aat gta tat gca tta gct gca gga agc tt              1009
226 Asn Lys Ser Asn Val Tyr Ala Leu Ala Ala Gly Ser
227                 225                 230
230 <210> SEQ ID NO: 10
231 <211> LENGTH: 165
232 <212> TYPE: PRT
233 <213> ORGANISM: Artificial Sequence
235 <220> FEATURE:
236 <223> OTHER INFORMATION: fib protein
238 <400> SEQUENCE: 10
239 Met Lys Asn Lys Leu Ile Ala Lys Ser Leu Leu Thr Ile Ala Ala Ile
240 1               5                   10                  15
241 Gly Ile Thr Thr Thr Thr Ile Ala Ser Thr Ala Asp Ala Ser Glu Gly
242         20                  25                  30
243 Tyr Gly Pro Arg Glu Lys Lys Pro Val Ser Ile Asn His Asn Ile Val
244         35                  40                  45
245 Glu Tyr Asn Asp Gly Thr Phe Lys Tyr Gln Ser Arg Pro Lys Phe Asn
246 50                  55                  60
247 Ser Thr Pro Lys Tyr Ile Lys Phe Lys His Asp Tyr Asn Ile Leu Glu
248 65                  70                  75                  80
249 Phe Asn Asp Gly Thr Phe Glu Tyr Gly Ala Arg Pro Gln Phe Asn Lys
250                 85                  90                  95
251 Pro Ala Ala Lys Thr Asp Ala Thr Ile Lys Lys Glu Gln Lys Leu Ile
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PATENT APPLICATION: **US/09/938,497A**   TIME: 11:17:54

Input Set : **A:\012889-086.ST25.txt**
Output Set: **N:\CRF4\09302003\I938497A.raw**

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252            100               105          .    110
253 Gln Ala Gln Asn Leu Val Arg Glu Phe Glu Lys Thr His Thr Val Ser
254         115               120            125
255 Ala His Arg Lys Ala Gln Lys Ala Val Asn Leu Val Ser Phe Glu Tyr
256      130               135  .         140
257 Lys Val Lys Lys Met Val Leu Gln Glu Arg Ile Asp Asn Val Leu Lys
258 145              150               155     .      160
259 Gln Gly Leu Val Arg
260               165
263 <210> SEQ ID NO: 11
264 <211> LENGTH: 68
265 <212> TYPE: PRT
266 <213> ORGANISM: Artificial Sequence
268 <220> FEATURE:
269 <223> OTHER INFORMATION: fib protein
271 <400> SEQUENCE: 11
272 Met Lys Phe Lys Lys Tyr Ile Leu Thr Gly Thr Leu Ala Leu Leu Leu
273 1             5               10             15
274 Ser Ser Thr Gly Ile Ala Thr Ile Glu Gly Asn Lys Ala Asp Ala Ser
275         20               25             30
276 Ser Leu Asp Lys Tyr Leu Thr Glu Ser Gln Phe His Asp Lys Arg Ile
277      35               40             45
278 Ala Glu Glu Leu Arg Thr Leu Leu Asn Lys Ser Asn Val Tyr Ala Leu
279    50               55             60          .
280 Ala Ala Gly Ser
281 65
284 <210> SEQ ID NO: 12
285 <211> LENGTH: 781
286 <212> TYPE: DNA           .
287 <213> ORGANISM: Artificial Sequence
289 <220> FEATURE:       .
290 <223> OTHER INFORMATION: fib gene from strain FDA 486
292 <400> SEQUENCE: 12
293 atagataact atattttgtc tatattataa agtgtttata gttaattaat aattagttaa 60
294 tttcaaaagt tgtataaata ggataactta ataaatgtaa gataataatt tggaggataa 120
295 ttaacatgaa aaataaattg atagcaaaat ctttattaac aatagcggca attggtatta 180
296 ctacaactac aattgcgtca acagcagatg cgagcgaagg atacggtcca agagaaaaga 240
297 aaccagtgag tattaatcac aatatcgtag agtacaatga tggtactttt aaatatcaat 300
298 ctagaccaaa atttaactca cacctaaat atattaaatt caaacatgac tataatattt 360
299 tagaatttaa cgatggtaca ttcgaatatg gtgcacgtcc acaatttaat aaaccagcag 420
300 cgaaaactga tgcaactatt aaaaaagaac aaaaattgat tcaagctcaa aatcttgtga 480
301 gagaatttga aaaaacacat actgtcagtg cacacagaaa agcacaaaag gcagtcaact 540
302 tagtttcgtt tgaatacaaa gtgaagaaaa tggtcttaca agagcgaatt gataatgtat 600
303 taaaacaagg attagtgaga taatacttct gtcattattt taagttcaaa ataatttaat 660
304 attatattat tttttattaa taaaacgact atgctattta atgccaggtt aatgtaactt 720
305 tcctaaaatt gactatataa tcgttaagta tcaattttaa ggagagttta caatgaaatt 780
306 t                                                            781
308 <210> SEQ ID NO: 13
309 <211> LENGTH: 785
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VERIFICATION SUMMARY   DATE: 09/30/2003
PATENT APPLICATION: **US/09/938,497A**   TIME: 11:17:55

Input Set : **A:\012889-086.ST25.txt**
Output Set: **N:\CRF4\09302003\I938497A.raw**

L:154 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order!
L:157 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:9
L:160 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:9